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**ENVIRONMENTAL PROTECTION AGENCY**

**40 CFR Part 136**

**[EPA-HQ-OW-2010-0192; FRL-9504-2]**

**Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act; Analysis and Sampling Procedures; Notice of Data Availability**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Notice of data availability.

**SUMMARY:** On September 23, 2010, EPA proposed to approve a number of new and revised test procedures (i.e., analytical methods) for measuring pollutants under the Clean Water Act. Today's notice announces the availability of new data on an analytical method for the measurement of oil and grease that EPA described in the earlier notice but did not propose to approve it for use. This notice discusses how EPA is considering revising its proposed regulatory requirements for this method. EPA is soliciting comment only on EPA's consideration of this method.

**DATES:** Comments must be received on or before [insert date 60 days after publication in the Federal Register].

**ADDRESSES:** Submit your comments, identified by Docket ID No. EPA-HQ-2010-0192, by one of the following methods:

- [www.regulations.gov](http://www.regulations.gov): Follow the on-line instructions for submitting comments.
- Email: [OW-docket@epamail.epa.gov](mailto:OW-docket@epamail.epa.gov) Attention Docket ID No. OW-2010-0192
- Mail: Water Docket, Environmental Protection Agency, Mailcode: 28221T, 1200 Pennsylvania Ave., NW, Washington, DC 20460.

- Hand Delivery: EPA Water Center, EPA West Building, Room B102, 1301 Constitution Avenue NW, Washington, DC, Attention Docket ID No. OW-2010-0192. Such deliveries are only accepted during the Docket's normal hours of operation, and special arrangements should be made for deliveries of boxed information.

*Instructions:* Direct your comments to Docket ID No. EPA-HQ-OW-2010-0192. EPA's policy is that all comments received will be included in the public docket without change and may be made available online at [www.regulations.gov](http://www.regulations.gov), including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through [www.regulations.gov](http://www.regulations.gov) or e-mail. The [www.regulations.gov](http://www.regulations.gov) website is an "anonymous access" system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an e-mail comment directly to EPA without going through [www.regulations.gov](http://www.regulations.gov) your e-mail address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD-ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses. For additional information about EPA's public docket visit the EPA Docket Center homepage at <http://www.epa.gov/epahome/dockets.htm>.

*Docket:* All documents in the docket are listed in the [www.regulations.gov](http://www.regulations.gov) index. Although listed in the index, some information is not publicly available, e.g., CBI or other information

whose disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly available only in hard copy. Publicly available docket materials are available either electronically in [www.regulations.gov](http://www.regulations.gov) or in hard copy at the Water Docket, EPA/DC, EPA West, Room B102, 1301 Constitution Ave., NW, Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566-1744, and the telephone number for the Water Docket is (202) 566-2426.

**FOR FURTHER INFORMATION CONTACT:** Maria Gomez-Taylor, Office of Science and Technology, Office of Water (4303-T), Environmental Protection Agency, 1200 Pennsylvania Avenue, NW; Washington, DC 20460; telephone number: 202-566-1005; fax number: 202-566-1053; email address: [Gomez-taylor.maria@epa.gov](mailto:Gomez-taylor.maria@epa.gov).

## **SUPPLEMENTARY INFORMATION:**

### **I. General Information**

#### **A. Does this Action Apply to Me?**

EPA Regions, as well as States, Territories and Tribes authorized to implement the National Pollutant Discharge Elimination System (NPDES) program, issue permits with conditions designed to ensure compliance with the technology-based and water quality-based requirements of the Clean Water Act (CWA). These permits may include restrictions on the quantity of pollutants that may be discharged as well as pollutant measurement and reporting requirements. If EPA has approved a test procedure for analysis of a specific pollutant, the NPDES permittee must use an approved test procedure (or an approved alternate test procedure) for the specific pollutant when measuring the required waste constituent. Similarly, if EPA has established sampling requirements, measurements taken under an NPDES permit must comply

with these requirements. Therefore, entities with NPDES permits will potentially be affected by the actions in this rulemaking. Categories and entities that may potentially be affected by the requirements of today's rule include:

Category	Examples of potentially affected entities
State, Territorial, and Indian Tribal Governments	States, Territories, and Tribes authorized to administer the NPDES permitting program; States, Territories, and Tribes providing certification under Clean Water Act section 401; State, Territorial, and Indian Tribal owned facilities that must conduct monitoring to comply with NPDES permits
Industry	Facilities that must conduct monitoring to comply with NPDES permits
Municipalities	POTWs or other municipality owned facilities that must conduct monitoring to comply with NPDES permits

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be affected by this action. This table lists types of entities that EPA is now aware of that could potentially be affected by this action. Other types of entities not listed in the table could also be affected. To determine whether your facility is affected by this action, you should carefully examine the applicability language at 40 CFR 122.1 (NPDES purpose and scope), 40 CFR 136.1 (NPDES permits and CWA) and 40 CFR 403.1 (Pretreatment standards purpose and applicability). If you have questions regarding the applicability of this action to a particular entity, consult the appropriate person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

#### **B. What Should I Consider as I Prepare My Comments for EPA?**

1. *Submitting CBI.* Do not submit this information to EPA through [www.regulations.gov](http://www.regulations.gov) or e-mail. Clearly mark the part or all of the information that you claim to be CBI. For CBI information in a disk or CD ROM that you mail to EPA, mark the outside of the disk or CD ROM as CBI and then identify electronically within the disk or CD ROM the specific

information that is claimed as CBI. In addition to one complete version of the comment that includes information claimed as CBI, a copy of the comment that does not contain the information claimed as CBI must be submitted for inclusion in the public docket. Information so marked will not be disclosed except in accordance with procedures set forth in 40 CFR part 2.

2. *Tips for Preparing Your Comments.* When submitting comments, remember to:

- Identify the rulemaking by docket number and other identifying information (subject heading, Federal Register date and page number).
- Follow directions - The agency may ask you to respond to specific questions or organize comments by referencing a Code of Federal Regulations (CFR) part or section number.
- Explain why you agree or disagree; suggest alternatives and substitute language for your requested changes.
- Describe any assumptions and provide any technical information and/or data that you used.
- If you estimate potential costs or burdens, explain how you arrived at your estimate in sufficient detail to allow for it to be reproduced.
- Provide specific examples to illustrate your concerns, and suggest alternatives.
- Explain your views as clearly as possible, avoiding the use of profanity or personal threats.
- Make sure to submit your comments by the comment period deadline identified.

## **II. Summary of New Information and Request for Comment**

### **A. Background on Proposed Rule**

On September 23, 2010, EPA proposed to add new and revised EPA methods to its Part

136 test procedures (75 FR 58024). The regulated community and laboratories use these approved methods for determining compliance with National Pollutant Discharge Elimination System (NPDES) permits or other monitoring requirements under the Clean Water Act (CWA). EPA periodically updates the list of approved methods to reflect advances in technology and provide entities more choices of approved compliance monitoring methods. Among other methods, in the September 2010 proposal, EPA proposed to add two oil and grease methods published by the Standard Methods Committee that use the same solvent as the existing Part 136 oil and grease methods. In the Notice, EPA also described three oil and grease methods published by ASTM International or the Standard Methods Committee that require a different extractant and/or a different measurement (i.e., determinative) technique than the existing Part 136 oil and grease methods. As explained in the Notice, oil and grease is a method-defined parameter. That is, the measurements obtained by the method are a specific artifact of the method and defined solely by the elements (solvent, determinative technique) used to measure the analyte. Because these three methods use a different extractant and/or a different determinative technique, how to translate measurements using these methods to those obtained under existing methods for purposes of comparison was not clear. Consequently, consistent with past practices, EPA did not propose to include these methods in Part 136.

#### **B. Method-defined Analytes**

A method-defined analyte includes certain parameters where the measurement results obtained are solely dependent on the method used. As a consequence, the results obtained are not directly comparable to results obtained by another method (i.e., the data derived from method-defined protocols cannot be reliably verified outside the method itself). EPA has defined a method-defined analyte in 40 CFR 136.6(a)(5) as “...an analyte defined solely by the method

used to determine the analyte. Such an analyte may be a physical parameter, a parameter that is not a specific chemical, or a parameter that may be comprised of a number of substances. Examples of such analytes include temperature, oil and grease, total suspended solids, total phenolics, turbidity, chemical oxygen demand, and biochemical oxygen demand.”

### **C. Oil and Grease**

Unlike many parameters, oil and grease is not a unique chemical entity, but is a mixture of chemical species that varies from source to source. Common substances that may contribute to oil and grease include petroleum based compounds such as fuels, motor oil, lubricating oil, soaps, waxes, and hydraulic oil and vegetable based compounds such as cooking oil and other fats. Oil and grease is defined by the method used to measure it (i.e., a method-defined analyte). The CWA defines oil and grease as a conventional parameter and hundreds of thousands of NPDES permits and indirect discharging permits contain oil and grease numerical limits. Currently, Part 136 lists three references to analytical methods for the measurement of oil in grease in such discharge permits. Overwhelmingly, the vast majority of discharges use EPA Method 1664A to measure compliance with such discharge limits. Method 1664A is a liquid/liquid extraction (LLE), gravimetric procedure that employs normal hexane (*n*-hexane) as the extraction solvent. This method also allows the use of solid-phase extraction (SPE) provided that the results obtained by SPE are equivalent to the results obtained by LLE.

### **D. Public Comments Related to Oil and Grease**

In response to the September 2010 proposal, EPA received several comments recommending that EPA approve recent methods that include new technologies, including alternative methods for oil and grease. One commenter stated that EPA's reasoning for not approving alternative test methods for oil and grease is contradictory to the Agency's "Summary"

statement that these regulations will "provide increased flexibility to the regulated community and laboratories in their selection of analytical methods (test procedures) for use in Clean Water Act programs." This commenter added that approving the new technologies would be more consistent with EPA's mission and purpose to "ensure that all Americans are protected from significant risks to human health and the environment where they live, learn and work."

Another commenter indicated that EPA should approve new technologies for oil and grease because n-hexane is a dangerous solvent. This commenter cited literature that describes n-hexane's toxicity to humans and to the environment. Still another commenter stated that fats, oils and greases are not exclusively "hexane extractable" compounds and claimed that other technologies and methods may be better at measuring these compounds, and may be used to better quantify how much fat, oil or grease is toxic to aquatic life or interferes with wastewater treatment. This commenter also stated that EPA should not specifically and uniquely endorse a solvent-specific method for "oil and grease" and requested that EPA reverse its decision that only n-hexane extractable oil and grease methods are acceptable.

### **III. ASTM Method D7575-10 for Oil and Grease**

Some of the comments focused exclusively on one particular oil and grease method EPA discussed in its proposal, ASTM D7575-10. Unlike EPA Method 1664A which uses n-hexane as the extractant and gravimetry for the measurement of the extracted materials, ASTM D7575-10 uses an extracting membrane followed by infrared measurement of the sample materials that can be retained on the membrane. This method was originally developed by Orono Spectral Solutions (OSS), and approved by ASTM on January 1, 2010 (Standard Test Method for Solvent-Free Membrane Recoverable Oil and Grease by Infrared Determination, ASTM D7575-10). Certain commenters to EPA's September 2010 proposal, including ASTM and OSS,



requested that EPA re-consider ASTM D7575-10 for the measurement of oil and grease under Clean Water Act programs. In particular, they cited that ASTM D7575-10 is solvent free and provides reliable and comparable results to EPA Method 1664A. As part of this re-consideration, these commenters submitted additional information on the health hazards associated with hexane as well as additional single laboratory comparability data between Method 1664A and ASTM D7575-10 and on additional matrices tested after the initial comparability study and associated statistical analysis. These data, EPA's analyses of these data, and communications related to the alternative ASTM method between EPA, OSS and ASTM are included as part of the record for today's notice.

EPA's consideration of ASTM D7575-10 is entirely novel. Because oil and grease is a method-defined parameter, with one exception, EPA has not considered promulgating multiple methods to measure oil and grease that are based on different extractants. Moreover, EPA has not considered multiple oil and grease methods that are based on different determinative techniques. The only exception to this was EPA's promulgation of EPA Method 1664A in 1999 to replace Method 413.1, a similar procedure that used Freon<sup>®</sup> (1,1, 2-trichloro-1,2,2-trifluoroethane (CFC-113; Freon-113)) as the extraction solvent. EPA made this exception because Freon<sup>®</sup> was banned by an international treaty, and until the ban went into effect, EPA allowed either of these oil and grease methods for CWA compliance. In both methods, the determinative technique is gravimetry and the only change was the extraction solvent (n-hexane instead of Freon<sup>®</sup>).

EPA is persuaded by commenters to its September 23, 2010 Notice that it should re-consider its position on ASTM D7575-10. Such a consideration represents a new path for EPA. As is always the case, EPA is proceeding carefully, with a particular focus on the underlying

data. EPA's consideration is specific to ASTM D7575-10 and should not be interpreted broadly to other oil and grease methods that use different extractants and/or determinative techniques, or more generally to other method-defined analytes. If EPA receives similar requests for other methods, it will evaluate each one individually.

Although the September 2010 proposal discussed the current use of EPA Method 1664A as a required testing method to determine the eligibility of materials for certain conditional exclusions for RCRA regulations under 40 CFR260.20 and 260.22 (i.e., delistings), and additionally proposed to allow the revised version of this testing method (Method 1664, Rev. B) for future delistings, EPA is not considering ASTM D7575-10 for use under the RCRA program. Until ASTM D7575-10 is validated for a full range of matrices covered by the RCRA program, EPA considers this new testing method to be limited to the Clean Water Act program.

#### **A. Technical Considerations Related to ASTM Method D7575-10**

##### **1. EPA Evaluation of This New Method**

Based on the data and information available in EPA's record, EPA concludes ASTM D7575-10 is a good stand-alone method for the measurement of oil and grease in wastewater. The method was single- and multi-lab tested following ASTM Standard Practice D2777 (Standard Practice for the Determination of Precision and Bias of Applicable Test methods of Committee D19 on Water) and produces similar recoveries and precision to EPA Method 1664A for those matrices tested and in the range of method applicability (5-200 mg/L).

In reviewing the method, EPA requested that ASTM revise its new standard to provide additional details on the underlying procedural steps – specifically in regards to sample homogenization and calibration verification – and to clarify the applicability (or lack thereof) of the method to non-wastewater matrices. ASTM revised the method write-up accordingly. See

DCN xxx for additional information.

## **2. Comparability of Results Between ASTM D7575-10 and EPA Method 1664A**

As explained above, with the exception of EPA's promulgation of Method 1664A to replace Method 413.1, EPA has not considered promulgating multiple methods to measure oil and grease that are based on different extractants nor has EPA considered promulgating oil and grease methods with different determinative techniques. As a result, EPA does not have a defined "process" for such considerations. For non-method-defined parameters where the analyte being measured is a single compound (e.g., copper, benzene), EPA often promulgates multiple methods that may be based on different determinative techniques for nationwide use. In such cases, EPA has a well-defined process for ensuring that the performance of a proposed method is acceptable (i.e., the proposed test procedure must demonstrate an improvement over current EPA-approved methods such as fewer matrix interferences, and better sensitivity, precision and recovery). For a new candidate test method employing a determinative technique that is different from those techniques used in existing approved methods, the applicant must develop quality control (QC) acceptance criteria based on the validation protocol for nationwide use applications (9 laboratories, each analyzing a different matrix). The QC acceptance criteria for the candidate method must then be compared to the QC acceptance criteria specifications for methods in Part 136 and the performance of the candidate method must be as good or better than that of an approved method. This process is described in the "Protocol for EPA Approval of New Methods for Organic and Inorganic Analytes in Wastewater and Drinking Water," March 1999.

In contrast, there is no well-defined process for the evaluation of a proposed test method for method-defined parameters. In addition to ensuring that the performance of the proposed method is acceptable as described above for non-method-defined parameters, EPA wants to ensure that results produced by the proposed method are comparable to results produced with the approved method. When EPA promulgated EPA Method 1664A to replace EPA Method 413.1, a similar procedure that used Freon<sup>®</sup> (1,1, 2-trichloro-1,2,2-trifluoroethane (CFC-113; Freon-113)) as the extraction solvent, EPA evaluated a variety of possible replacement extracting solvents in addition to n-hexane. EPA selected n-hexane and promulgated Method 1664A after conducting extensive side-by-side studies of several extracting solvents on a variety of samples representing a wide range of matrices (see “Preliminary Report of EPA Efforts to Replace Freon for the Determination of Oil and Grease,” EPA-821-R-93-011, September 1993, and Report of EPA Efforts to Replace Freon for the Determination of Oil and Grease and Total Petroleum Hydrocarbons, EPA-820-R-95003, April 1995). In considering which solvent produced results most comparable to results obtained with Freon<sup>®</sup>, EPA conducted a Root Mean Squared Deviation (RMSD) evaluation of the data collected in the side-by-side studies. None of the alternative solvents produced results statistically comparable to results produced by Freon<sup>®</sup>. However, EPA concluded at the time that n-hexane was appropriate as an alternative solvent, based on overall extraction results (96% versus 100% for Freon) and analytical practical considerations (e.g., boiling point).

In considering ASTM D7575-10, EPA reviewed the available single laboratory comparability data between ASTM D7575-10 and EPA Method 1664A. Initially, these data included triplicate analyses of samples from seven different wastewater matrices (eight POTWs, dairy, machine shop, gunsmith, auto garage, auto salvage yard, and fish processor). Later, OSS

submitted additional data for three matrices (bilge water, peanut processor, and lunchmeat processor) that were collected after the single laboratory study.<sup>1</sup> EPA conducted a Root Mean Squared Deviation (RMSD) comparability assessment with these data, following the methodology set forth in "Analytical Method Guidance for EPA Method 1664A Implementation and Use (40 CFR part 136), EPA/821-R-00-003, February 2000." For this assessment, EPA first used the original data set and subsequently included the additional data for three matrices and determined the results were not statistically comparable, with or without the data for the additional matrices. This outcome was not unexpected because of the intrinsic differences in the two methods and the nature of method-defined parameters. Similarly, when EPA performed a RMSD comparability assessment before promulgating EPA Method 1664A in place of EPA Method 413.1, EPA did not find the results to be statistically comparable.<sup>2</sup>

As explained in Section II.B, the comparability of results is a significant issue with method-defined analytes such as oil and grease because the results depend on the method used. For oil and grease, the amount of oil and grease material extracted depends on the solvent or membrane used for the extraction of oil and grease. As such, it may not be possible for results from methods that use different extraction techniques to be compared statistically. For example, EPA Method 1664A employs distillation at 85°C, and as such, petroleum materials from gasoline through #2 fuel oil and non-petroleum materials including carboxylic and other organic acids may be partially lost during this solvent removal operation. Similarly, some crude oils and heavy fuel oils contain a significant percentage of materials that are not soluble in the n-hexane

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<sup>1</sup> OSS also submitted data for several other matrices that EPA did not include in the analysis because these data were based on only one sample result per matrix and thus lacked the required replicates for a statistical analysis. Additionally, ASTM recently submitted triplicate data for three other matrices. Because EPA received this data after conducting its statistical analysis, this data is not included in the RMSD assessment described in this paragraph, but is included in the record for today's notice.

<sup>2</sup> Note that in absence of statistical comparability, EPA ultimately determined that EPA Method 1664A could be used as a direct replacement for EPA Method 413.1.

solvent of EPA Method 1664A resulting in low recoveries for these materials. ASTM D7575-10 has no such solvent removal step which could increase or decrease the amount of petroleum and non-petroleum materials measured by ASTM D7575-10 relative to Method 1664A.

For the reason identified above, in the case of ASTM D7575-10, EPA concludes it is not appropriate to apply the same statistical assessment as is done for non-method-defined parameters. As a result, EPA applied similar comparison techniques as those performed in replacing EPA Method 413.1 with EPA Method 1664A. As mentioned above, during that replacement analysis, n-hexane was found to extract 96% of the oil and grease that could be extracted by Freon. This 4% difference was deemed insignificant based on the variability of oil and grease measurements (around the order of 10% relative standard deviation) and the confidence intervals about the 96% extraction (plus or minus 20% extracted). When comparing the results of ASTM D7575-10 to EPA Method 1664A, the non-solvent method removes an average of 99.6% of the oil and grease that was removed by n-hexane under the same conditions. The variability of the situational comparisons along with the 10% relative standard deviation for oil and grease measurements once again allow us to conclude that the 0.4% difference is not significant. Using this approach, for the range of the ASTM D7575-10 applicability (5-200 mg/L), ASTM D7575-10 could serve as a substitute for Method 1664A in the same fashion as n-hexane served as a replacement for Freon.

#### **B. Summary of EPA's Re-Consideration of ASTM D7575-10**

Based on the information presented in today's Notice, EPA is re-considering its decision not to include ASTM D7575-10 in 40 CFR Part 136 as an alternative to EPA Method 1664A for measuring oil and grease. EPA has three main reasons for this re-consideration. First, EPA's analysis demonstrates ASTM D7575-10 is an acceptable stand-alone method for the

measurement of oil in grease in wastewater for the applicable reporting range (5-200 mg/L) and it produces results that are generally very close to those obtained using EPA Method 1664A for the matrices tested. Second, this method has certain advantages over the currently approved method. EPA supports pollution prevention, and is particularly persuaded by the substantial advantages associated with the green aspects of this membrane technology (e.g., it uses a solventless extraction, there is no solvent waste, and no analyst exposure to solvent). Finally, ASTM D7575-10 may offer other advantages such as ease of analysis, reduced analysis time, and lower analytical costs.

### **C. Implementation Considerations Related to Multiple Oil and Grease Methods**

EPA recognizes that if it promulgates ASTM D7575-10 in 40 CFR Part 136 as an alternative to EPA method 1664A, permittees and control authorities may still have concerns related to the results obtained from ASTM D7575-10 relative to EPA Method 1664A, particularly for matrices not evaluated to date. While EPA has determined that the results of the two methods are comparable over the applicable range where the two methods overlap (5-200 mg/L), because of the wide variety and type of individual compounds that may be measured by oil and grease and because oil and grease is extensively incorporated in permits covering a wide variety of wastewater matrices, permittees or control authorities may continue to have compliance concerns (i.e., a permittee could be in or out of compliance) simply due to a change in the test method used to evaluate samples.

When EPA promulgated EPA Method 1664A to replace EPA Method 413.1, EPA and other stakeholders had similar concerns. These concerns were magnified because Method 1664A was a replacement, rather than an alternative, to the existing method at that time. To

accommodate concerns about differences in results, EPA allowed permitting authorities to establish a conversion factor by having the discharger perform a side-by-side comparison of Method 1664 and the Freon<sup>®</sup> extraction method and then adjusting the discharge limits, if necessary, to account for differences in the permit. EPA further recommended a specific process to follow for the side-by-side comparison in the guidance document mentioned earlier [Analytical Method Guidance for EPA Method 1664A Implementation and Use (40 CFR part 136), EPA/821-R-00-003, February 2000].

In contrast to EPA's replacement of Freon with n-hexane, if EPA were to promulgate ASTM D7575-10, it would not lead to any requirement on permit holders. In this case, unless ASTM D7575-10 is specified in the permit, promulgating ASTM D7575-10 would simply provide additional flexibility to permit holders in analyzing for oil and grease. Because this would be optional and because of the burden that would be placed on the permitting authorities in reviewing side-by-side data, EPA is not currently persuaded that it should include a provision providing the same ability to adjust discharge limits based on side-by side-comparison of EPA Method 1664A to ASTM D7575-10 as it did when it replaced Freon with n-hexane. However, to the extent that permittees would elect to use ASTM D7575-10 and permitting authorities would accept the use of ASTM D-7575-10 rather than EPA Method 1664A, nothing would prevent them from conducting a side-by-side comparison of the two methods. EPA would recommend such a side-by-side comparison if permittees and/or permitting authorities have concerns about a specific matrix, particularly when the measured oil and grease values when switching to ASTM D7575-10 are more than 20% lower from values routinely measured by EPA Method 1664A (the 20% variability around oil and grease measurements is discussed in section III.A.2 of today's Notice).



#### **IV. Request for Comments**

Based on the new information and EPA's analysis of this information as described in this Notice, EPA is reconsidering whether to promulgate ASTM D7575-10 in 40 CFR Part 136 as an alternative method for oil and grease where the applicable ranges overlap (5-200 mg/L) and requests public comments on this reconsideration, the supporting data, and the resulting analysis. While ASTM D7575-10 has significant pollution prevention advantages over the currently approved method, EPA recognizes the potential impact that this new method could have on the hundreds of thousands of oil and grease determinations in regulatory Clean Water Act programs and desires to obtain additional input from stakeholders. Specifically, EPA requests comments on the following:

1. Whether EPA should reconsider promulgating this additional method for oil and grease based on different extractants and determinative techniques than EPA Method 1664A.
2. EPA's current view, based on the data it has reviewed to date, that ASTM D7575-10 is an acceptable choice for the determination of oil and grease for the range (5 to 200 mg/L) evaluated.
3. EPA's current conclusion that permit limit adjustment based on side-by-side comparisons of EPA Method 1664A and ASTM D7575-10 is not appropriate. EPA is particularly interested in obtaining comments from permitting authorities on this issue and estimates of the burden associated with reviewing such requests.
4. If EPA were to allow a side-by-side comparison with limit adjustment as necessary, should EPA look to the approach used for n-hexane in place of Freon (see section III.C above) or should EPA consider a different approach?

**V. Referenced New Docket Materials**

1. January 16, 2009 Memorandum from Richard Reding on Modifications to Method 1664A.
2. May 14, 1999 Federal Register (64 FR 26315).
3. Preliminary Report of EPA Efforts to Replace Freon for the Determination of Oil and Grease, EPA-821-R-93-011, September 1993.
4. Report of EPA Efforts to Replace Freon for the Determination of Oil and Grease and Total Petroleum Hydrocarbons: Phase II, EPA-820-R-95-003, April 1995.
5. October 15, 2010 e-mail from Tyler Martin containing the following data files:
  - a. Multi-Lab Validation Raw Data
  - b. Expanded ASTM D7575 Validation Report
  - c. Single-Lab Validation Raw Data
  - d. Comparability Analysis from Single-Lab Validation Results
6. October 19, 2010 e-mail from Tyler Martin containing additional comparability data between Method 1664 and ASTM D7575.
7. October 21, 2010 e-mail from Tyler Martin with clarification on data submitted.
8. June 28, 2011 letter from James A. Thomas, ASTM President to Mary Smith, EPA, with ASTM International D19 Water Response to US EPA Questions Concerning ASTM Standard D7575.
9. Analytical Method Guidance for EPA Method 1664A Implementation and Use (40 CFR part 136), EPA/821-R-00-003, February 2000.
10. Protocol for EPA Approval of New Methods for Organic and Inorganic Analytes in Wastewater and Drinking Water, March 1999.

11. Study Report from the Testing of Additional Industrial Wastewater Matrices in Support of ASTM D7575 for USEPA's Reconsideration of this Method in the Forthcoming Method Update Rule, November 2011.

Dated: December 2, 2011

Nancy K. Stoner,

Acting Assistant Administrator for Water.

[FR Doc. 2011-32063 Filed 12/13/2011 at 8:45 am; Publication Date: 12/14/2011]